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Simone Bizzarri

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413

EXAMINER

GEBRESILASSIE, KIBROM K

ART UNIT

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2128

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/580,268	<b>Applicant(s)</b> BIZZARRI ET AL.	
	<b>Examiner</b> KIBROM GEBRESILASSIE	<b>Art Unit</b> 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22,24-31 and 33-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22,24-31 and 33-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This communication is responsive to RCE filed on 03/12/2010.
2. Claims 22, 24-31, 33-44 are presented for examination.

### ***Response to Arguments***

3. Applicant's argument relating to art rejection is not persuasive.
  - a. Applicant's argued neither Talpade nor Ko, take alone or in combination, disclose or suggest at least "simulating a communication network through objects that model respective networks devices" (Remarks, pg. 9, third paragraph).

Examiner respectfully disagrees. Talpade et al discloses a simulator used to establish the simulation environment and represent a network based on the network model and source model, wherein the model of the network consisting of set of nodes, including core routers and edge routers and a set of links connecting the nodes (See: paragraph [0034] and paragraph [0036]).

- b. Applicant's argued Talpade still does not disclose any customization of the "quality of service profile" for a user, because Talpade does not disclose that its "traffic class" or "QoS criteria" would be customized for a user" (Remarks, pg. 10 lines 9-11).

Examiner respectfully disagrees. Talpade et al discloses simulate the classes of traffic, further the bandwidth information on links, the traffic source of models and the QoS criteria are provided by the user (See: paragraph [0025]) which is equivalent to customization.

c. Applicant's argued Talpade does not disclose inserting, for at least one network user, a respective parameter related to a particular respective quality of service profile selectively identified for one of said objects" (Remarks, pg. 10 lines 14-16).

Examiner respectfully disagrees. Talpade et al discloses "identifying the classes of traffic (i.e. parameters) and associated QoS criteria, and provide the identified classes of traffic, source models and QoS criteria to the simulator using input device (See: paragraph [0024]) which is analogous to "inserting".

d. Applicant's argued "Talpade's simulator may determine quality of service (QoS) mechanisms, which is, QoS mechanism for controlling network resources. This is clearly different from applicant's claims "quality of service profile" as recited in claim 22" (Remarks, pg. 10, second paragraph).

Examiner respectfully disagrees. Applicants have provided no evidence to support the QoS mechanism is different from the QoS of claimed invention. Applicants amount to a general allegation without specifically pointing out the differences. In any case, the art discloses QoS criteria as defined by applicants.

e. Applicant's argued "Ko does not make up for at least the aforementioned deficiencies of Talpade at least because Ko is not directed to computer implemented simulation" (Remarks, pg. 11 paragraph three).

Examiner respectfully disagrees. Ko et al discloses "the device driver is suitable for driving an unmodified consumer mobile communication device, in this way the equipment can be arrange to simulate a subscriber to the digital mobile

phone network, preferably using realistic test traffic and the performance of a network under these conditions can be evaluated" (See: paragraph [0066]). The recited portion of the prior art clearly directed to simulate a subscriber. Therefore, it is obvious to one of ordinary skill in the art to combine both references because they are analogous to each other.

***Priority***

4. Acknowledgment is made of applicant's claim for a benefit of National stage application No. PCT/IT2003/000783 (filed November 27, 2003) under 35 USC 120, 121, or 365(c).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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6. Claims 22, 24-31, and 33-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication No. 2002/0145982 issued to Talpade et al with US Publication No. 2003/0100299 issued to Ko et al.

a. As per Claims 1-21 (Cancelled).

b. As per Claim 22, Talpade et al discloses a method, implemented using a computer system comprising:

a processor and a memory, for simulating a communications network through objects that model respective network devices (such as "system 150"; Fig. 1), comprising the steps of:

Simulating, using the computer, through said objects the supply of network services according to respective quality of service profiles (such as "simulate traffic classes and determine the QoS mechanisms based on the simulation; See: [0025]; Fig. 2 #200), wherein the simulating comprising:

selectively identifying, using the computer, for each of said objects, at least one quality of service profile (such as "identifying the classes of traffic and associated QoS criteria, the ISP may identify a set of applications, each class of traffic may support one or more applications, application may include voice-over IP, Web TCP"; See: [0024]; Fig. 2 #210); and

dynamically configuring said objects, using the computer, to simulate the supply of the service corresponding to said selectively identified quality of service profile (such as "allocate network resources based on QoS mechanisms, parameters, and multiplexing gain, establish flows and configure nodes through

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which flow is established based on QoS mechanisms, parameters, and multiplexing gain"; See: Fig. 2 step #240 and step#270); and

inserting, for at least one network user, a respective parameter related to a particular respective quality of service profile, selectively identified for one of said objects, wherein the steps are applied for simulating networks (such as "identifying the classes of traffic and associated QoS criteria, and provide the identified classes of traffic, source models and QoS criteria to the simulator using input device (i.e. inserting); See: paragraph [0024]).

Talpade et al discloses communication between customer sites and different routers. However, Talpade et al fails expressly to disclose mobile terminals cooperating with blocks or network devices.

Ko et al discloses mobile terminals cooperating with blocks or network devices (such as "the test traffic (i.e. parameter) may be sent to or received from the further device (i.e. mobile communication (See: par [0099] lines 4-10) by the terminal 508"; See: par [0099]-[0100]).

It would have been obvious to one of ordinary skill in the art to combine the teaching of Ko et al with the teaching of Talpade et al because both references drawn to monitoring network system performance. The motivation to do so would be able to investigate the functioning of the network (Ko et al).

c. As per Claim 23, Canceled.

d. As per Claim 24, Talpade et al discloses the method according to claim 22, further comprising the steps of: selectively associating respective quality of

service profiles, using the computer, to a plurality of network users (See: [0034]); and performing at least one simulation, using the computer, in which every user uses a different service from that used by other users of said plurality (See: [0038]).

e. As per Claim 25, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals, said quality of service profile comprising parameters chosen from the group of: traffic class (such as "traffic class requirement"; See: Fig. 3), maximum transfer time of a data unit (such as "amount of time the traffic is on or off"; See: par [0023]), guaranteed transfer speed for data transmitted by mobile terminal toward the network (such as "available bandwidth"; See: par [0028]), maximum transfer speed for data transmitted from mobile terminal toward the network (such as "sufficient bandwidth"; See: par [0028]), guaranteed transfer speed for data transmitted by the network toward a mobile terminal (such as "available bandwidth"; See: par [0028]), and maximum transfer speed for data transmitted by the network toward a mobile terminal (such as "sufficient bandwidth"; See: par [0028]).

f. As per Claim 26, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals connected through radio interfaces, comprising respective control modules of calls, the method comprises the step of directly sending said parameter from said control module of the mobile terminal toward



the control module of the switching centre in view of the forwarding of said parameter to modules of the related radio interfaces that start the connection according to the type of service pointed out in said parameter (such as “when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes; See: [0028], [0030]).

Talpade et al fails expressly to disclose a switching centre.

However, Ko et al discloses a switching centre (such as...the network has a hierarchical structure in which a plurality of base station controllers is connected to Mobile services switching Centre (MSC)...; See: Col. 1 [005]).

It would have been obvious to one ordinary skill in the art to combine the teaching of Ko et al with the teaching of Talpade et al because both reference concern with network performance. The motivation to do so would be able to access details of the network functionality and in particular able to determine the response of the network to an individual call (Ko et al).

g. As per Claim 27, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals connected through radio interfaces to a network node, said mobile terminals and said network node comprising respective modules for managing the mobile terminal session and for managing the support

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node session, the method comprises the step of directly sending said parameter from said module for managing the mobile terminal session toward said module for managing the support node session in view of the forwarding of such parameter to the modules of the related radio interfaces that start the connection according to the type of service pointed out in said parameter (such as “when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes; See: [0028], [0030]).

Talpade et al fails expressly to disclose packet switching call. However, Ko et al discloses a switching centre (See: Fig. 2 #212 and corresponding texts).

It would have been obvious to one ordinary skill in the art to combine the teaching of Ko et al with the teaching of Talpade et al because both reference concern with network performance. The motivation to do so would be able to access details of the network functionality and in particular able to determine the response of the network to an individual call (Ko et al).

h. As per Claim 28, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals cooperating with blocks responsible for starting the connection, wherein, in case of simulation of a call originated from a terminal, said parameter is specified by said terminal to said blocks during the procedure

for starting the connection (such as “when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes; See: [0028], [0030]).

i. As per Claim 29, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals cooperating with blocks responsible for starting the connection, wherein, in case of simulation of a terminated call toward a determined network terminal, comprises the step of taking said parameter from the terminal object of the call, said taking step being performed by said blocks responsible for starting the connection (such as “when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes; See: [0028], [0030]).

j. As per Claim 30, Talpade et al discloses the method according to claim 22, wherein the steps are applied, using the computer, for simulating networks comprising mobile terminals cooperating with network devices, comprising, in case of simulation of a terminated call on a mobile terminal, the step of sending

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the indication of connection start beginning from simulated network devices omitting the indication of what quality of service profile to use and obtaining said profile from the mobile terminal to which the call is directed (such as “when the first customer site wishes to communicate with another customer site, the first customer site may send to the admission controller a request for connection based on the determined QoS mechanisms, their associated parameters, and the determined multiplexing gain, the admission controller may configure one or more of the nodes...; See: [0028], [0030]).

k. As per Claim 31, the instant claims recite substantially same limitation as the above rejected claims 22, and therefore rejected under the same rationale.

l. As per Claim 32, Canceled.

m. As per Claims 33-42, the instant claims recite substantially same limitation as the above rejected claims 24-30, and therefore rejected under the same rationale.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIBROM GEBRESILASSIE whose telephone number is (571)272-8571. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571)272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kamini S Shah/  
Supervisory Patent Examiner, Art  
Unit 2128

/KIBROM GEBRESILASSIE/  
Examiner, Art Unit 2128